

Technical Support Document
for
EPA's Notice of Direct Final Rulemaking

on revisions to the
California State Implementation Plan

as submitted by the State of California, Air Resources Board
for the South Coast Air Quality Management District

EPA's Analysis of
South Coast Air Quality Management District's
Rule 442, Usage of Solvents

United States Environmental Protection Agency, Region IX
Air Division

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**South Coast Air Quality Management District (SCAQMD),
Rule 442, Usage of Solvents**

Chronology of SCAQMD Adoption, Air Resources Board Submittal, and EPA Actions

- The South Coast Air Quality Management District Governing Board adopted Rule 442 on December 15, 2000.
- The State of California submitted Rule 442 to EPA on May 8, 2001 as a revision to the California State Implementation Plan (SIP).
- On July 20, 2001, EPA found complete CARB's May 8, 2001 submittal of Rule 442.

EPA has reviewed, approved, and incorporated into the SIP a prior version of Rule 442 (see 48 *Federal Register* (FR) 52054, November 16, 1983.)

Rule Summary

South Coast Air Quality Management District Rule 442, Usage of Solvents, is a rule specifying the emission limits for organic materials used in operations not governed by Regulation 11 rules. These emission limits take the form of daily and monthly facility wide emission caps. A facility may meet these caps by installing emission control equipment, changing product formulation, or modifying manufacturing operations.

Rule Evaluation

1. Statutory Requirements & EPA Guidance

In section 182(a)(2)(A) of the Clean Air Act Amendments of 1990 (CAA), Congress required that nonattainment areas, such as SCAQMD, fix their deficient reasonably available control technology (RACT) rules for volatile organic compounds (VOCs) and established a May 15, 1991 deadline for states to submit corrections of those deficiencies. The CAA requires the SCAQMD to adopt and correct RACT rules pursuant to pre-amended (the Clean Air Act prior to its 1990 amendment) section 172(b) as interpreted in pre-amendment guidance. This guidance included the following document:

- "Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations," USEPA, May 28, 1988.

There are no Control Technique Guidelines for Rule 442.

Because a previous version of Rule 442 is part of the SIP, EPA must ensure that this most recent version of Rule 442, adopted December 15, 2000, is consistent with Section 110(l) of the CAA. According to Section 110(l), EPA must determine that a SIP revision will not interfere with any statutory requirements concerning reasonable further progress (RFP) towards or attainment of the National Ambient Air Quality Standards (NAAQS), or any other applicable requirement of the CAA. In this case, EPA must review the December 15, 2000 version of Rule 442 and compare it with the 1983 SIP-approved version. In particular, EPA is concerned that rescission, delayed implementation of a SIP-approved rule, or adoption of emission limits that are less stringent than the SIP-approved rule do not interfere with RFP and attainment of the NAAQS.

2. Evaluation of Rule

SCAQMD's December 15, 2000 amendments to Rule 442 revise the 1983 version within the SIP. Rule 442 has been reformatted to be similar to other SCAQMD prohibitory rules. Consequently, the rule now incorporates the following sections: purpose, applicability, definitions, requirements, control equipment, test methods, recordkeeping, storage and disposal of VOC containing materials, and exemptions. Most of the 1983 rule language has been incorporated within this new format. Hourly emission limits have been removed from the rule while the 1983 daily emission caps have been retained. Requirements for control equipment are strengthened and are consistent with the capture and control efficiency requirements in other SCAQMD rules. The general emissions reduction requirement of 85% within the 1983 version of the rule is retained through December 31, 2002.

The most significant addition to Rule 442 is the emission requirements that apply upon January 1, 2003. Daily VOC emission caps are replaced by a monthly emission cap of 833 pounds per facility. This monthly cap may be met in either of three ways. First, it may be met by process changes, product reformulations or substitutions, or other innovations. Second, an emission control device may be used in conjunction with these product or operational changes to meet the emissions cap provided an Alternative Compliance Plan is submitted and approved by the SCAQMD Executive Officer. Finally, an emission control device can be installed to account for all of the required emission reductions. The monthly emissions cap of 833 pounds per month is equivalent to the daily cap in subsection (d)(1)(B) for photochemically reactive solvents assuming 22 working days a month. Furthermore, the 833 pound monthly limit is more stringent than the sunseting 600 pound daily emissions cap for non-photochemically reactive organic solvents.

To conclude this evaluation, despite the reformatting of Rule 442, its requirements are mostly unchanged until January 1, 2003 when the provisions allowing Alternative Compliance Plans subject to the monthly emissions cap begin. Also, Rule 442 contains adequate test methods provisions for monitoring the compliance of regulated facilities.

2.a. Section 110(l) Requirements.

EPA must compare the December 15, 2000 version of Rule 442 with the 1983 SIP-approved version. In particular, EPA is concerned that a rescission or delayed implementation of a SIP-approved rule, or adoption of emission limits that are less stringent than the SIP-approved rule do not interfere with RFP and attainment of the NAAQS.

As noted earlier, daily VOC emission caps are replaced by a monthly emission cap of 833 pounds per facility. The monthly emissions cap of 833 pounds per month is equivalent to the daily cap in subsection (d)(1)(B) assuming 22 working days a month. Facilities emitting just at or just below the daily emissions cap derive no benefit from the monthly emissions cap.

To conclude, the submitted Rule 442 does not interfere with reasonable further progress or attainment. The daily pattern of emissions is not expected to increase.

3. Recommendations for Future Revisions

We have no recommendations at this time.

4. Rule Deficiencies

We have found no deficiencies that provoke a limited approval and limited disapproval action.

Projected Impact of Rule 442

Rule 442 is an older rule most likely included within the baseline assumptions of any emission reduction calculation within a given plan. Its impact may be difficult to calculate.

Recommendation

Section 110(k) of the CAA contains provisions governing EPA's review of plans and regulations submitted by State of California, air districts, and localities for inclusion in the California State Implementation Plan. EPA can propose one of four actions on Rule 442: full approval, conditional approval, limited approval/disapproval, or a full disapproval.

Rule 442 contains no appendix D/RACT deficiencies and its amendments do not threaten either reasonable further progress or attainment.

In conclusion, EPA proposes a full approval of the December 15, 2000 adopted version of SCAQMD's Rule 442 - Usage of Solvents and its inclusion into the California State Implementation Plan.

Attachments

1. SCAQMD, Rule 442 - Usage of Solvents, adopted December 15, 2000.
2. SCAQMD, Rule 442 - Usage of Solvents, adopted March 15, 1982. (Applicable SIP version).
3. "Issues Relating to VOC (Volatile Organic Compound) Regulation Cutpoints, Deficiencies, and Deviations," USEPA, May 28, 1988, cover piece only.
4. "Final Staff Report for: Proposed Amendments to Rule 442 - Usage of Solvents," South Coast Air Quality Management District, November 16, 2000.